

English translation of the amended sheets of International Preliminary Examination Report 16

CLAIMS

1. X-radiation imagery device comprising at least one detection matrix made of a semiconducting material comprising pixels (11) to convert incident X-photons into electric charges and a silicon-based electric charges reading panel comprising several electronic devices, each electronic device being integrated by pixel (11), characterized in that each detecting matrix is made of a layer of semiconducting material deposited in vapour phase on the electric charges reading panel.

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- 2. Process for making an X-radiation imagery device comprising at least one detecting matrix made of a semiconducting material comprising pixels (11), to convert incident X-photons into electric charges, and an electric charges reading panel (10) based on silicon comprising several electronic devices, each electronic device being integrated by pixel (11), characterized in that each detecting matrix is obtained by vapour phase deposition of a semiconductor (13) on the electric charges reading panel.
- 3. Process according to claim 2, in which the evaporation properties of this semiconductor are such that the deposition can at a temperature such that the electronic devices are not damaged.
- 4. Process according to claim 2, in which the semiconducting material used to make the matrix of detection pixels is CdTe, HgI_2 or PbI_2 .



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- 5. Process according to claim 2, in which electronic devices made using a 1.25 $\mu \rm m$ technological system are used.
- 6. Process according to claim 2, in which electronic devices made using a 0.1 μm technological system are used.